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U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
National Ocean Service
Office of Ocean Resources Conservation and Assessment
Hazardous Materials Response and Assessment Division
Coastal Resources Coordination Branch

February 21, 1995

Ms. Monica Rolluda
U.S. Environmental Protection Agency, HW-113
1200 Sixth Avenue
Seattle, Washington 98101

Dear Ms. Rolluda:

This letter provides comments on the Weyerhauser Chlor-Alkali Plant, Longview, Washington from the Coastal Resources Coordination (CRC) program of NOAA's Hazardous Materials Response and Assessment Division. The CRC program works with EPA and other agencies to evaluate and mitigate risks to NOAA resources from uncontrolled releases of oil and hazardous substances. Comments are based primarily on a review of the document *Columbia River Sediment, Water, and Biological Data Summary, Weyerhaeuser Chlor-Alkali Plant, Longview, Washington,* prepared by CH2M Hill, September, 1994.

Trust Resources

Habitats of concern to NOAA include surface waters and associated bottom substrates of the Columbia River estuary in the vicinity of the Weyerhaeuser site. Both the Washington and the Oregon Departments of Fish and Wildlife consider the Columbia River a major salmonid migratory corridor that supports large salmonid populations and high levels of fishing. The Columbia River near the site provides significant nursery and forage habitat for juvenile salmonids during downstream migrations as well as a corridor for migrating adults. Typical juvenile salmonid behavior involves an inshore movement and settling down to river bottoms in areas of adequate substrate, cover, and cool water. During their freshwater residence, all salmonids are opportunistic drift and benthic feeders. The nearshore areas adjacent to the site are considered habitat for juvenile salmonids and are possibly used by these fish for extended periods. Other anadromous species of concern to NOAA which utilize the Columbia River near the site include American shad, white sturgeon, eulachon, and Pacific lamprey.

Mercury

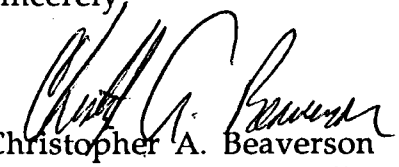
Mercury has been detected in sediment collected from near the site at concentrations exceeding the ERL concentration (0.15 mg/kg) during recent (1993) sampling events. It was not clear from the summary document whether the aerial and vertical extent of contamination has been well-defined. For example, the depths to which sediment samples were collected was not presented and it is not known whether likely depositional areas were targeted for sampling. The flow dynamics of the river in the vicinity of the outfalls should be understood because depositional areas may be present downstream of the discharge points rather than immediately adjacent to the outfalls. The concentrations of mercury detected in source areas of the site indicate a potential for large releases of mercury in the past and the fate of this material should be thoroughly investigated. The data indicate that a risk may be posed to NOAA trust resources in the vicinity of the site, but additional information would be needed to determine the magnitude of the threat.

Groundwater

In past studies, very high concentrations of mercury were measured in groundwater (126 µg/l, compared to the freshwater chronic AWQC of 0.012 µg/l). This contaminated groundwater may be discharging into the Columbia River. During past sampling of mercury in surface water of the Columbia River, mercury was detected only once (out of 14 samples collected between 1970 and 1990). However, the detected concentration of 1.0 µg/l exceeded the AWQC by almost two orders of magnitude. For the most part, detection limits for mercury in past studies were high (generally 0.2 to 0.5 µg/l). There may be a risk posed to aquatic organisms from groundwater discharge. Dilution would probably occur rapidly in the Columbia River, but mercury concentrations could remain elevated in nearshore areas close to groundwater discharge points. The groundwater pathway should be addressed in the ecological risk assessment of the site.

Thank-you for the opportunity to comment on this site. The Columbia River watershed is of great importance to NOAA, and we appreciate the opportunity to participate in the review of documents submitted to EPA. If you have any questions regarding this letter, or if the CRC program can provide you with additional technical assistance, please contact me at (206) 553-2101 or John Lindsay at (206) 526-6939.

Sincerely,



Christopher A. Beaverson
Coastal Resource Coordinator